

SEQUENCE LISTING

<110> Khan, Nisar A.
Benner, Robert

<120> Gene regulator

<130> 2183-5223US

<140> 10/028,075

<141> 2001-12-21

<150> EP 01203748.7

<151> 2001-10-04

<160> 175

<170> PatentIn Ver. 2.1

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Leu Gln Gly Val

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Ala Gln Gly Val

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Val Leu Pro Ala Leu Pro

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1 5

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<210> 17

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<210> 32
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<400> 34
Leu Gln Gly Val Leu Pro Ala Leu Pro Gln Val Val Cys
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<210> 35

<211> 38
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 Val Val Cys Asn Tyr Arg Asp Val Arg Phe Glu Ser Ile Arg Leu Pro
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 Gly Cys Pro Arg Gly Val Asn Pro Val Val Ser Tyr Ala Val Ala Leu
 20 25 30
 Ser Cys Gln Cys Ala Leu
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 Arg Pro Arg Cys Arg Pro Ile Asn Ala Thr Leu Ala Val Glu Lys
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 Glu Gly Cys Pro Val Cys Ile Thr Val Asn Thr Thr Ile Cys Ala Gly
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 Tyr Cys Pro Thr
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 <210> 38
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<400> 38
Ser Lys Ala Pro Pro Pro Ser Leu Pro Ser Pro Ser Arg Leu Pro Gly
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Pro Ser

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1 5 10

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Cys

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signalling molecule

<400> 45
Arg Pro Arg Cys Arg Pro Ile Asn Ala Thr Leu Ala Val Glu Lys Glu
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Gly Cys Pro Val Cys Ile Thr Val Asn Thr Thr Ile Cys Ala Gly Tyr
20 25 30

Cys Pro Thr
35

<210> 46
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<212> PRT
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<220>
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signalling molecule

<400> 46

Cys Ala Leu Cys Arg Arg Ser Thr Thr Asp Cys Gly Gly Pro Lys Asp
1 5 10 15

His Pro Leu Thr Cys
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<210> 47

<211> 18

<212> PRT

<213> Artificial Sequence

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<223> Description of Artificial Sequence: peptide
signalling molecule

<400> 47

Cys Arg Arg Ser Thr Thr Asp Cys Gly Gly Pro Lys Asp His Pro Leu
1 5 10 15

Thr Cys

<210> 48

<211> 37

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<223> Description of Artificial Sequence: peptide
signalling molecule

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1 5 10 15

Pro Pro Ser Leu Pro Ser Pro Ser Arg Leu Pro Gly Pro Ser Asp Thr
20 25 30

Pro Ile Leu Pro Gln
35

<210> 49

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signalling molecule

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 <210> 52
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 <210> 54
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<210> 55
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 Leu Asp Ala Leu Pro
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pdb/1B90/1B90-A

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pdb/1GLU/1GLU-A

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<210> 66
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 <210> 68
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 <210> 69
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 <210> 70
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 <210> 71
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<210> 72
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<210> 73
<211> 5
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pdb/1CQK/1CQK-A

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Pro Ala Ala Pro Gln
1 5

<210> 74
<211> 6
<212> PRT
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<220>
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pdb/1CQK/1CQK-A

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Pro Ala Ala Pro Gln Val
1 5

<210> 75
<211> 4
<212> PRT
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 Leu Pro Ala Leu
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<210> 76
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 Pro Ala Leu Pro
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<210> 77
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 Pro Ala Leu Pro Glu
 1 5

<210> 78
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<220>
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 Leu Thr Glu Leu Leu
 1 5

<210> 79
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<400> 79
 Pro Pro Pro Ala Leu Pro Pro Lys Lys Arg
 1 5 10

<210> 80

<211> 4
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pdb/1RLQ/1RLQ-R

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Leu Pro Pro Leu
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<210> 81
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pdb/1RLQ/1RLQ-R; swissnew/P01229/LSHB HUMAN

<400> 81
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<210> 82
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<400> 82
Leu Pro Gly Leu
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pdb/1GJS/1GJS-A

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Leu Ala Ala Leu
1

<210> 84
<211> 5
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<220>
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pdb/1GJS/1GJS-A

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Leu Ala Ala Leu Pro
1 5

<210> 85
<211> 4
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pdb/1GBR/1GBR-B

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Pro Lys Leu Pro
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<210> 86
<211> 6
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pdb/1A78/1A78-A

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Val Leu Pro Ser Ile Pro
1 5

<210> 87
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pdb/1FZV/1FZV-A

<400> 87
Met Leu Pro Ala Val Pro
1 5

<210> 88
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<223> Description of Artificial Sequence: pdb/1JLI/1JLI

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Leu Pro Cys Leu
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<210> 89
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Pro Cys Leu Pro
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<210> 90
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pdb/1HSS/1HSS-A

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Val Pro Ala Leu Pro
1 5

<210> 91
<211> 4
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<220>
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pdb/1PRX/1PRX-A

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Pro Thr Ile Pro
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<210> 92
<211> 6
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<220>
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pdb/1PRX/1PRX-A

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Val Leu Pro Thr Ile Pro
1 5

<210> 93
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Val Leu Pro Gly Phe Pro
1 5

<210> 94
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1

<210> 95
<211> 5
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pdb/1GER/1GER-A

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Leu Pro Ala Leu Pro
1 5

<210> 96
<211> 5
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<220>
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<400> 96
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1 5

<210> 97
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<220>
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<222> (2)
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Met Xaa Arg Val Leu Gln Gly Val Leu Pro Ala Leu Pro Gln Val Val
1 5 10 15

Cys

<210> 98
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<220>
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Cys

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<400> 100

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Lys	Val	Ile	Gln	Gly	Ser	Leu	Asp	Ser	Leu	Pro	Gln	Ala	Val
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<400> 103

Val	Leu	Gln	Ala	Ile	Leu	Pro	Ser	Ala	Pro	Gln
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<210> 104

<211> 5

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Leu Gln Ala Ile Leu
1 5

<210> 105
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Pro Ser Ala Pro
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<210> 106
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Lys Val Leu Gln Gly Arg Leu Pro Ala Val Ala Gln Ala Val
1 5 10

<210> 107
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Leu Pro Ala Val
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<210> 108
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<213> Artificial Sequence

<220>
<223> Description of Artificial Sequence: Mm.129320.2

<400> 108
Leu Val Gln Lys Val Val Pro Met Leu Pro Arg Leu Leu Cys
1 5 10

<210> 109
<211> 4
<212> PRT

<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence: Mm.129320.2

<400> 109

Leu Pro Arg Leu

1

<210> 110

<211> 4

<212> PRT

<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence: Mm.129320.2

<400> 110

Pro Met Leu Pro

1

<210> 111

<211> 5

<212> PRT

<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence: Mm.22430.1

<400> 111

Pro Ser Ala Pro Gln

1

5

<210> 112

<211> 11

<212> PRT

<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence: P20155

<400> 112

Leu Pro Gly Cys Pro Arg His Phe Asn Pro Val

1

5

10

<210> 113

<211> 11

<212> PRT

<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence: Rn.2337.1

<400> 113

Leu Val Gly Cys Pro Arg Asp Tyr Asp Pro Val
1 5 10

<210> 114
<211> 4
<212> PRT
<213> Artificial Sequence

<220>
<223> Description of Artificial Sequence: Rn.2337.1

<400> 114
Leu Val Gly Cys
1

<210> 115
<211> 6
<212> PRT
<213> Artificial Sequence

<220>
<223> Description of Artificial Sequence: Hs.297775.1

<400> 115
Pro Gly Cys Pro Arg Gly
1 5

<210> 116
<211> 5
<212> PRT
<213> Artificial Sequence

<220>
<223> Description of Artificial Sequence: Mm.1359.1

<400> 116
Leu Pro Gly Cys Pro
1 5

<210> 117
<211> 6
<212> PRT
<213> Artificial Sequence

<220>
<223> Description of Artificial Sequence:
sptrembl/056177/056177

<400> 117
Val Leu Pro Ala Ala Pro
1 5

<210> 118
<211> 9

<212> PRT
 <213> Artificial Sequence

 <220>
 <223> Description of Artificial Sequence:
 sptrembl/Q9W234/Q9W234

 <400> 118
 Leu Ala Gly Thr Ile Pro Ala Thr Pro
 1 5
 <210> 119
 <211> 4
 <212> PRT
 <213> Artificial Sequence

 <220>
 <223> Description of Artificial Sequence:
 sptrembl/Q9W234/Q9W234

 <400> 119
 Pro Ala Thr Pro
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 <210> 120
 <211> 7
 <212> PRT
 <213> Artificial Sequence

 <220>
 <223> Description of Artificial Sequence:
 sptrembl/Q9IYZ3/Q9IYZ3

 <400> 120
 Gly Leu Leu Pro Cys Leu Pro
 1 5

 <210> 121
 <211> 4
 <212> PRT
 <213> Artificial Sequence

 <220>
 <223> Description of Artificial Sequence:
 sptrembl/Q9PVW5/Q9PVW5

 <400> 121
 Pro Gly Ala Pro
 1

 <210> 122
 <211> 10
 <212> PRT
 <213> Artificial Sequence

<220>

<223> Description of Artificial Sequence:
sptrembl/Q9PVW5/Q9PVW5

<400> 122

Leu Pro Gln Arg Pro Arg Gly Pro Asn Pro
1 5 10

<210> 123

<211> 4

<212> PRT

<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence:
sptrembl/Q9PVW5/Q9PVW5

<400> 123

Pro Arg Gly Pro
1

<210> 124

<211> 4

<212> PRT

<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence: Hs.303116.2

<400> 124

Gly Cys Pro Arg
1

<210> 125

<211> 6

<212> PRT

<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence:
pdb/1DU3/1DU3-A

<400> 125

Gly Cys Pro Arg Gly Met.
1 5

<210> 126

<211> 4

<212> PRT

<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence: pdb/1BIO/1BIO

<400> 126

Leu Gln His Val

1

<210> 127

<211> 4

<212> PRT

<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence:

pdb/1FL7/1FL7-B

<400> 127

Val Pro Gly Cys

1

<210> 128

<211> 4

<212> PRT

<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence:

pdb/1HR6/1HR6-A

<400> 128

Cys Pro Arg Gly

1

<210> 129

<211> 4

<212> PRT

<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence: pdb/1H6/1HR6-A

<400> 129

Leu Lys Gly Cys

1

<210> 130

<211> 4

<212> PRT

<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence: pdb/1BFA/1BFA

<400> 130

Pro Pro Gly Pro

1

<210> 131
<211> 8
<212> PRT
<213> Artificial Sequence

<220>
<223> Description of Artificial Sequence: pdb/1BFA/1BFA

<400> 131
Leu Pro Gly Cys Pro Arg Glu Val
1 5

<210> 132
<211> 4
<212> PRT
<213> Artificial Sequence

<220>
<223> Description of Artificial Sequence: pdb/1BFA/1BFA

<400> 132
Cys Pro Arg Glu
1

<210> 133
<211> 17
<212> PRT
<213> Artificial Sequence

<220>
<223> Description of Artificial Sequence:
swissnew/P01229/LSHB HUMAN

<400> 133
Met Met Arg Val Leu Gln Ala Val Leu Pro Pro Leu Pro Gln Val Val
1 5 10 15

Cys

<210> 134
<211> 4
<212> PRT
<213> Artificial Sequence

<220>
<223> Description of Artificial Sequence:
swissnew/P01229/LSHB HUMAN

<400> 134
Met Met Arg Val
1

<210> 135

<211> 6
<212> PRT
<213> Artificial Sequence

<220>
<223> Description of Artificial Sequence:
 swissnew/P01229/LSHB HUMAN

<400> 135
Val Leu Pro Pro Leu Pro
 1 5

<210> 136
<211> 7
<212> PRT
<213> Artificial Sequence

<220>
<223> Description of Artificial Sequence:
 swissnew/P01229/LSHB HUMAN

<400> 136
Val Leu Pro Pro Leu Pro Gln
 1 5

<210> 137
<211> 7
<212> PRT
<213> Artificial Sequence

<220>
<223> Description of Artificial Sequence:
 swissnew/P01229/LSHB HUMAN

<400> 137
Ala Val Leu Pro Pro Leu Pro
 1 5

<210> 138
<211> 8
<212> PRT
<213> Artificial Sequence

<220>
<223> Description of Artificial Sequence:
 swissnew/P01229/LSHB HUMAN

<400> 138
Ala Val Leu Pro Pro Leu Pro Gln
 1 5

<210> 139
<211> 17
<212> PRT

<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence:
swissnew/P07434/CGHB PAPAN

<400> 139

Met Met Arg Val Leu Gln Ala Val Leu Pro Pro Val Pro Gln Val Val
1 5 10 15

Cys

<210> 140

<211> 4

<212> PRT

<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence:
swissnew/P07434/CGHB PAPAN

<400> 140

Leu Gln Ala Gly
1

<210> 141

<211> 6

<212> PRT

<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence:
swissnew/P07434/CGHB PAPAN

<400> 141

Val Leu Pro Pro Val Pro
1 5

<210> 142

<211> 7

<212> PRT

<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence:
swissnew/P07434/CGHB PAPAN

<400> 142

Val Leu Pro Pro Val Pro Gln
1 5

<210> 143

<211> 7

<212> PRT
 <213> Artificial Sequence

 <220>
 <223> Description of Artificial Sequence:
 swissnew/P07434/CGHB PAPAN

 <400> 143
 Ala Val Leu Pro Pro Val Pro
 1 5

 <210> 144
 <211> 8
 <212> PRT
 <213> Artificial Sequence

 <220>
 <223> Description of Artificial Sequence:
 swissnew/P07434/CGHB PAPAN

 <400> 144
 Ala Val Leu Pro Pro Val Pro Gln
 1 5

 <210> 145
 <211> 4
 <212> PRT
 <213> Artificial Sequence

 <220>
 <223> Description of Artificial Sequence:
 swissnew/Q28376/TSHB HORSE

 <400> 145

 Met Thr Arg Asp
 1

 <210> 146
 <211> 4
 <212> PRT
 <213> Artificial Sequence

 <220>
 <223> Description of Artificial Sequence:
 swissnew/Q28376/TSHB HORSE

 <400> 146
 Gln Asp Val Cys
 1

 <210> 147
 <211> 4
 <212> PRT

<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence:
swissnew/Q28376/TSHB HORSE

<400> 147

Ile Pro Gly Cys
1

<210> 148

<211> 5

<212> PRT

<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence:
sptrembl/Q9Z284/Q9Z284

<400> 148

Pro Ala Leu Pro Ser
1 5

<210> 149

<211> 6

<212> PRT

<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence:
sptrembl/Q9UCG8/Q9UCG8

<400> 149

Leu Pro Gly Gly Pro Arg
1 5

<210> 150

<211> 4

<212> PRT

<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence:
sptrembl/Q9UCG8/Q9UCG8

<400> 150

Leu Pro Gly Gly
1

<210> 151

<211> 4

<212> PRT

<213> Artificial Sequence

<220>
 <223> Description of Artificial Sequence:
 sptrembl/Q9UCG8/Q9UCG8

<400> 151
 Gly Gly Pro Arg
 1

<210> 152
 <211> 4
 <212> PRT
 <213> Artificial Sequence

<220>
 <223> Description of Artificial Sequence: XP_028754

<400> 152
 Leu Gln Arg Gly
 1

<210> 153
 <211> 5
 <212> PRT
 <213> Artificial Sequence

<220>
 <223> Description of Artificial Sequence: XP_028754

<400> 153
 Leu Gln Arg Gly Val
 1 5

<210> 154
 <211> 4
 <212> PRT
 <213> Artificial Sequence

<220>
 <223> Description of Artificial Sequence: XP_028754

<400> 154
 Leu Gly Gln Leu
 1

<210> 155
 <211> 13
 <212> PRT
 <213> Artificial Sequence

<220>
 <223> Description of Artificial Sequence: SignalP (CBS)

<400> 155

Met Thr Arg Val Leu Gln Gly Val Leu Pro Ala Leu Pro
1 5 10

<210> 156

<211> 9

<212> PRT

<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence: HLA molecule
type I (A_0201)

<400> 156

Val Leu Gln Gly Val Leu Pro Ala Leu
1 5

<210> 157

<211> 9

<212> PRT

<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence: HLA molecule
type I (A_0201)

<400> 157

Gly Val Leu Pro Ala Leu Pro Gln Val
1 5

<210> 158

<211> 9

<212> PRT

<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence: HLA molecule
type I (A_0201)

<400> 158

Val Leu Pro Ala Leu Pro Gln Val Val
1 5

<210> 159

<211> 9

<212> PRT

<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence: HLA molecule
type I (A_0201)

<400> 159

Arg Leu Pro Gly Cys Pro Arg Gly Val
1 5

<210> 160

<211> 9

<212> PRT

<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence: HLA molecule
type I (A_0201)

<400> 160

Thr Met Thr Arg Val Leu Gln Gly Val
1 5

<210> 161

<211> 15

<212> PRT

<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence: MHC II (H2-Ak
15-mers)

<400> 161

Cys Pro Thr Met Thr Arg Val Leu Gln Gly Val Leu Pro Ala Leu
1 5 10 15

<210> 162

<211> 15

<212> PRT

<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence: MHC II (H2-Ak
15-mers)

<400> 162

Pro Gly Cys Pro Arg Gly Val Asn Pro Val Val Ser Tyr Ala Val
1 5 10 15

<210> 163

<211> 15

<212> PRT

<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence: HLA-DRB1*0101
15-mers

<400> 163

Pro Arg Gly Val Asn Pro Val Val Ser Tyr Ala Val Ala Leu Ser
1 5 10 15

<210> 164
<211> 15
<212> PRT
<213> Artificial Sequence

<220>
<223> Description of Artificial Sequence: HLA-DRB1*0101
15-mers

<400> 164
Thr Arg Val Leu Gln Gly Val Leu Pro Ala Leu Pro Gln Val Val
1 5 10 15

<210> 165
<211> 15
<212> PRT
<213> Artificial Sequence

<220>
<223> Description of Artificial Sequence: HLA-DRB1*0101
15-mers

<400> 165
Leu Gln Gly Val Leu Pro Ala Leu Pro Gln Val Val Cys Asn Tyr
1 5 10 15

<210> 166
<211> 15
<212> PRT
<213> Artificial Sequence

<220>
<223> Description of Artificial Sequence: HLA-DRB1*0301
(DR17) 15-mers

<400> 166
Met Thr Arg Val Leu Gln Gly Val Leu Pro Ala Leu Pro Gln Val
1 5 10 15

<210> 167
<211> 15
<212> PRT
<213> Artificial Sequence

<220>
<223> Description of Artificial Sequence: HLA-DRB1*0301
(DR17) 15-mers

<400> 167
Ser Ile Arg Leu Pro Gly Cys Pro Arg Gly Val Asn Pro Val Val
1 5 10 15

<210> 168

<211> 7
<212> PRT
<213> Artificial Sequence

<220>
<223> Description of Artificial Sequence: NMPF-56
peptide

<400> 168
Val Ala Pro Ala Leu Pro Gln
1 5

<210> 169
<211> 35
<212> PRT
<213> Artificial Sequence

<220>
<223> Description of Artificial Sequence: NMPF-62
peptide

<400> 169
Val Val Cys Asn Tyr Arg Asp Val Arg Phe Glu Ser Ile Arg Leu Pro
1 5 10 15

Gly Cys Pro Arg Gly Val Asn Pro Val Val Ser Tyr Ala Val Ala Leu
20 25 30

Ser Cys Gly
35

<210> 170
<211> 7
<212> PRT
<213> Artificial Sequence

<220>
<223> Description of Artificial Sequence: NMPF-67
peptide

<400> 170
Cys Pro Arg Gly Val Asn Pro
1 5

<210> 171
<211> 14
<212> PRT
<213> Artificial Sequence

<220>
<223> Description of Artificial Sequence: NMPF-70
peptide

<400> 171

Met Thr Arg Val Leu Gln Gly Val Leu Pro Ala Leu Pro Gln
1 5 10

<210> 172
<211> 18
<212> PRT
<213> Artificial Sequence

<220>
<223> Description of Artificial Sequence: NMPF-75
peptide

<400> 172
Ser Lys Ala Pro Pro Pro Ser Leu Pro Ser Pro Ser Arg Leu Pro Gly
1 5 10 15

Pro Cys

<210> 173
<211> 7
<212> PRT
<213> Artificial Sequence

<220>
<223> Description of Artificial Sequence: NMPF-56
peptide

<400> 173
Val Ala Pro Ala Leu Pro Gln
1 5

<210> 174
<211> 17
<212> PRT
<213> Artificial Sequence

<220>
<223> Description of Artificial Sequence: NMPF-71
peptide

<400> 174
Met Thr Arg Val Leu Pro Gly Val Leu Pro Ala Leu Pro Gln Val Val
1 5 10 15

Cys

<210> 175
<211> 10
<212> PRT
<213> Artificial Sequence

<220>
<223> Description of Artificial Sequence: NMPF peptide

<400> 175
Cys Arg Gly Val Asn Pro Val Val Ser
1 5